IS MEDICAL EDUCATION OF THE YOUNGER GENERATION SHIFTED FROM BOOKISH LEARNING TO SKILL LEARNING?. (GENESIS OF CLINICAL SKILL LABS)

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ABSTRACT

India is one of the fastest growing countries in the world. Skills are essential for economic growth and social development for a country. The strength of India is its youth population. Most of the youth of India are not fully skilled as per the requirements of the industry. Skills and knowledge are the key factors in order to overcome hurdles and help India to embark on a road of endless growth. Skill development helps in reducing the unemployment level in the country.The present era has witnessed rapid technological advancement, the covid19 pandemic has also intensified the disruption in the world of work. Making students skillful is the ultimate aim of teaching. The Osmania Medical College, Hyderabad,Telangana state launched the first-of-its-kind 'Skill Lab' in Telangana. The lab is a valuable platform for medical professionals to practice procedural skills like trauma management, basic life support, pediatric emergency, obstetrics emergency and acute cardiac management. "Medical education of the younger generation has shifted from bookish learning to skill learning". We need to take this seriously and all the departments, especially the clinical department should ensure proper training of the students in an emergency. The genesis of the skill labs is not only to train doctors and paramedics but also police and sanitation workers. The State government is procuring mannequins so that programmes can be done in different sections.

KEYWORDS: Skill Development, Pediatric Emergency, Obstetrics Emergency, Acute Cardiac Management. "Clinical Skills", Genesis of Skill Labs,

INTRODUCTION

Execution of clinical techniques on patients by integrating skill and simulation-based teaching and learning as supplementary to traditional methods of bedside clinical teaching. (1)

The most important thing in developing a skill is to teach how to solve problems or handle a particular situation rather than how to arrive at an approved set of solutions (2)

The emergence of skill and simulation centers, which, in turn, have become an important educational tool to nurture and acquire the necessary clinical skills which can be problem based, subject specific, and continuum of care driven.(3,4)

The term "clinical skills" involves effective communication, examination, reasoning, and technical and practical procedures which include clinical data interpretation, presentation, documentation, legal consideration, patient management, decision-making, team work, administration, leadership, and professionalism (5,6)

The skill and simulation center is a state-of-the-art facility that permits medical students and the practicing clinicians with opportunities to learn and obtain clinical skills in a safely prepared and controlled environment (7)

Skill- and simulation-based training in medical education is important for making capable and self-reliant health-care professionals (8,9)

The skills achieved through the simulation centers and their application in medical care of real patients have stayed a subject of discussion and for additional exploration (10,11)

The Indian Medical Council has instructed all the medical colleges across the country to include the same in their undergraduate and postgraduate (PG) academic curricula (12)

Dr. S. C. Patil & Prof. Amaresh B Charantimath (2021) conducted a study on "Employability through Skill Development Programmes - an overview of significance of Employability skills".(13)

Vidhyadhar T. Banajawad & Dr.Mukta S. Adi(2020) conducted a study on "A study on skill development programmes for rural youth in India" with the objective to ascertain the current status, challenges and the Government initiatives for the skill development in India. .(14)

Anita Swain & Sunita Swain (2020) conducted a study on "Skill Development in India: Challenges & Opportunities". The study intended to analyse the data sourced from National Skill Development Corporation.(15)

The study aimed to assess the skill landscape of India in the wake of emerging technological disruptions, global transformation and international mobility of workforce. (16)

Rajni Singh (2019), conducted a study on "Research - based learning on skill development of engineering graduates: (17)

Dilip Chenoy (2019) conducted a study on "Skill development for accelerating the manufacturing sector: the role of 'new-age' skills for 'Make in India'". The aim of the study was to focus on developing right skills to address the growing skill gap in various manufacturing sectors in the context of changing industrial landscape defined by new-age technologies.(18)

Kavery Ganguly, Ashok Gulati & Joachim Von Braun (2019) conducted research on "Skill Development in Indian Agriculture and Food Processing Sectors: A Scoping Exercise". The objective of the research was to study the policies and institutions that are operational in this context of skill formation in India, with a focus on the agriculture and food sector.(19)

Krishnamoorthy A. Srimathi H. (2019) conducted a study on "Skill Development - The Future of India". The study analysed the practices of skill-based vocational and higher education initiatives and concluded that the global requirements of workforce have to be carefully studied and analysed and adequate steps have to be taken to impart the vocational and related skills mandated by the industries. (20)

History of Skill Development in India:

In India, the concept of Skill Development was introduced post-independence in 1956 . In 1961, the Apprenticeship Act was framed for providing practical training to technically qualified persons in various trades and promoting new skilled manpower. The Indian Education Commission (Kothari Commission) was appointed in 1964 to overhaul the Indian Education Sector by providing policies & guidelines for the development of education in India. The National Labour Policy was framed in 1966. In 1968, the first National Policy on Education was framed. The first Industrial Training Institute (ITI) was set up in 1969 by the Ministry of Labour & Employment (MoLE), Government of India. New National Policy of Education was framed in 1986. The All-India Council of Technical Education (AICTE) was formed in 1987, as the official regulator and funder for polytechnics and technical colleges. The National Policy of Education was modified in 1992. 1990s witnessed the opening up of the economy with substantial growth in IT industry and service sector and relative slowdown in the manufacturing and engineering sector. These paradigm shift resulted in framing of the first National Policy on Skill Development in 2009 and effort was made to enhance the private partnership to expand the capacity of the skills training sector. The National Skills Development Agency (NSDA) was established in 2013. In 2015, the Skill India Mission was launched, the National Policy on Skill Development and Entrepreneurship was framed and the Training and Apprenticeship Division was moved from MoLE to MSDE.

What is skill development?
- Skill development is improving specific skills to be more efficient and effective when you perform a task.
- There are three types of skills: functional, self-management and special knowledge.
- The chief objective is to empower the youth of the country with adequate skill sets that will enable their employment in relevant sectors and improve productivity.

Skill May Be:
a. Intellectual or cognitive, includes clinical reasoning and decision making skills,
b. Procedural or psychomotor skills that require manual dexterity and include laboratory and clinical skills,
c. Communication skills,
d. Team skills including leadership skills.

Best Skills for Medical Student
Medical school students should master certain soft skills like humility, empathy, communication, leadership, and flexibility.

Clinical skills
- Clinical skills are abilities of health care professionals in assessing, diagnosing, and providing care for patients.
- It also describes the applied medical knowledge, related to assessing bloodwork.
- Physicians, nurses, surgeons, lab technicians, medical assistants, and physical therapists all use clinical skills in their roles.
- clinical skills are learned while interning and gaining hands-on experience with treating patients.
- Clinical skills can be both soft skills and hard skills.
- Soft skills refer to a set of personal attributes or traits that enable individuals to interact effectively and harmoniously with others in various settings such as the

workplace, social gatherings, and personal relationships.

- Soft skills include communication skills, teamwork, time management, problem-solving, emotional intelligence, and adaptability.
- **Soft skills** are communication, are important for interacting with patients and gathering enough information to diagnose and treat them accurately.

Hard skills are more technical abilities that are specific to your profession, such as reading vital signs, collecting samples, and administering medication.

Communication

Health care professionals should be trained to obtain advanced communication skills because much of their work relies on communicating with patients, their families, and medical teams. Communication skills include the ability to share your thoughts, listen to others, understand, and read nonverbal communication, such as written word or body language.

Genesis of skill labs

First-of-its-kind Skill Lab launched in Osmania Medical College The Osmania Medical College launched the first-of-its-kind 'Skill Lab' in Telangana. The lab is a valuable platform for medical professionals to practice procedural skills like trauma management, basic life support, pediatric emergency, obstetrics emergency and acute cardiac management. It is a prototype demo and learning facility for healthcare professionals to fine tune their clinical skills.The skills lab is funded by the Department of Human Research, Ministry of Health and Family Welfare, Government of India, under National Emergency Life Support (NELS). It will cater to nearly 500 under-graduates and post-graduates and several hundred para-medical technicians every year. "The education of the younger generation has shifted from bookish learning to skill learning. We need to take this seriously and all the departments, especially the clinical department should ensure proper training of the students in an emergency. The State government is procuring mannequins so that programmes can be done in different sections." The students will now be able to proficiently manage surgical, cardiac and obstetric emergencies with greater efficiency and skill. Those undergoing training will be awarded nationally recognised training certificates from this facility.

Skill Development in Medical Students

Medical education in India as well as throughout the world has undergone significant changes due to rapid advances in medical technology.

Modern medicine has challenged the traditional method of clinical skills' teaching, training, and learning.

The term "clinical skills" involves effective communication, examination, reasoning, and technical and practical procedures.

Medical students may have to go through more practical training

Undergraduate medical students get more practical training to bridge the gap between theory and practice.

Integration between disciplines, bridging gaps between hospital-based medicine and community medicine.

Basic and laboratory sciences would be maximum in the first year and will progressively decrease in the second and third year.

Radiology lectures can be included in anatomy to teach students cross sectional anatomy of brain, abdomen, foetal anatomy during embryology teaching etc. during the first year itself.

Forensic Medicine can be effectively taught during gynecology and obstetrics (rape, assault), surgery (injuries), pharmacology (toxicology). Legal experts can be called for medico-legal issues.

The foundation courses will be taken during the first and second year and the rest of the curriculum will be taught along with the clinical subjects.

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Evidence-based medicine

Evidence-based medicine requires high competency levels in various clinical skills such as examination of patients and execution of clinical techniques on patients by integrating skill and simulation-based teaching and learning as supplementary to traditional methods of bedside clinical teaching.

The ongoing skill and simulation center project aims to provide teaching, training, and learning in various clinical procedures for both medical students and clinicians.

Training of the interdisciplinary team took place in the skill and simulation center.

Functions of Skill Labs

- To deliver hands-on learning experiences and educational materials ,course goals as directed by the syllabus
- To accommodate novel learning requirements of students and educational experiences
- To increase students' preparedness before their introduction to clinical training in hospital and for dealing with high-risk cases

- To enrich communication skills, cognitive skills, and psychomotor skills
- To determine the importance of collaboration and team building

Physicians must possess the following soft skills
1. **Leadership:** Give your team members the support and motivation
2. **Empathy:** Taking the time to listen to people's concerns and developing a long-term relationship.
3. **Stress Management:** Taking care of your own health is the first step to taking care of others.
4. **Confidence in your skills:** It's important that you feel confident in your skills and then project that confidence in your work.
5. **Learning from feedback:** Learning from every situation is critical. Be open, receptive, and willing to learn.
6. **Positive outlook:** Positive perspectives are often beneficial to people.

Physician Requires the Following Skills
a. **Empathy:** Understanding and valuing the feelings and emotions of patients, exhibiting understanding in difficult circumstances.
   Spending time carefully listening to patients, addressing their worries, and expressing true concern.

b. **Intelligence:** Possessing a strong foundation of medical knowledge and staying updated on advancements in the field.
   Adopting essential and well-informed decisions based on knowledge of medical research and facts.

c. **Communication:** Clearly conveying complex medical information to patients in a way they can understand.
   Coordinating well with coworkers, nurses, and other medical specialists to ensure effective patient care.

d. **Respectfulness:** Treating all patients with dignity and respect, regardless of their background, beliefs, or socioeconomic status.
   Recognizing the competence and efforts of colleagues and other healthcare team members.

e. **Professionalism:** Maintaining a high standard of ethical behavior and integrity.
   Adhering to professional norms of conduct and prioritizing the well-being of patients before personal interests.

f. **Hard working:** Commitment to putting in the necessary time and effort to provide thorough and effective patient care.
   Determination to constantly learn and adapt to new medical advances and technologies.

g. **Confidence:** Displaying self-assurance in decision-making and communicating with patients and colleagues.

Striking a balance between arrogance and humility, acknowledging your own incompetence, and, when necessary, seeking assistance.

Clinical Skills
Globally, companies globally are focussing on skill building and are looking for a multi-skilled workforce. | Photo Credit: Pixabay

Skill-based learning has become a necessity today as we live in an era of unprecedented transformation.

The National Education Policy 2020 emphasises practical, hands-on skilling rather than classroom-based learning.

India has been grappling with challenges like unemployment and graduates who are unemployable and lack soft skills.

Despite having a wide pool of talent, many youngsters are unable to find jobs due to a lack of the required skill sets.

What we need is to understand the difference between skill-based and knowledge-based education.(21)

Improving clinical skills involves a combination of practical experience, continuous learning, and interpersonal development.
1. **Hands – on – experience:** Improving clinical skills involves a combination of practical experience, continuous learning, and interpersonal development.
2. **Observe and learn:** Pay attention to the healthcare professionals to observe their clinical skills, how they communicate with patients, conduct examinations, and make decisions.
3. **Seek feedback:** Request constructive feedback from supervisors, mentors for improvement and focus on enhancing specific skills.
4. **Continuing learning:** Stay updated on medical literature, guidelines, and advancements in your field

and take advantage of online courses and workshops

5. **Simulation training:** Participate in simulation exercises to practice clinical scenarios to improve decision-making, and build confidence.

6. **Interactive learning:** Engage in case discussions, utilize online forums, study groups, or medical community events for interactive learning.

7. **Develop communication skills:** Work on effective communication with patients, explaining medical information in a clear and empathetic manner.

8. **Time management:** Learn to manage time efficiently during patient encounters, examinations, and documentation.

9. **Reflective Practice:** Regularly reflect on your clinical experiences, how to apply lessons learned to future situations for continuous improvement.

10. **Patient-Centered Care:** Keep the patient at the center of your practice, considering a collaborative and respectful relationship with patients.

CONCLUSIONS

Skill-based learning has become a necessity today as we live in an era of unprecedented transformation. Skill development is critical for economic growth and social development. The Indian Government has laid a special focus on expanding and improving the skill education and training in the country. Undergraduate medical students are all set to get more practical training with the Medical Council of India proposing an innovative curriculum to bridge the gap between theory and practice. Mutual practice is the most effective method of skill development. Teacher should act as guide and mentor during skill development; but he should allow students to exercise their initiative and judgment.

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